

KHRISTICH, A.I.

8(6)

PHASE I BOOK EXPLOITATION

SOV/1865

Babenko, Yuriy Aleksandrovich, Grigoriy Stepanovich Gladkov, Grigoriy Afanas'yevich Klimenko, Vladimir Petrovich Naumchenko, and Aleksandr Ignat'yevich Khristich

Elektrifikatsiya Ukrayiny za roky Radyans'koy vlady (Electrification of the Ukraine During the Years of the Soviet Regime) Kiyev, Derzh. vyd-vo tekhn. lit-ry USSR, 1958. 150 p. 3,000 copies printed.

Resp. Ed.: I.T. Shvetsya, Academician, UkrSSR Academy of Sciences; Ed.: M. Pysarenko; Tech. Ed.: Z. Vortman.

PURPOSE: The book is intended for the general reader.

COVERAGE: The authors discuss electrification of the national economy of the Ukraine during the prerevolutionary period and during the Soviet Five-Year Plans. Achievements of the Soviet regime are noted. No personalities are mentioned. There are no references.

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AVAILABLE: Library of Congress (TK 86.U5E35)

Card 3/3

JP/1a1
7-20-59

BABENKO, Yuriy Aleksandrovich; GLADKOV, Grigoriy Stepanovich; KLIMENKO, Grigoriy Afanas'yevich; NAUMCHENKO, Vladimir Petrovich; KHRISTICH, Aleksandr Ignat'yevich; PISARENKO, M., red.; GUSAROV, K., tekhn. red.

[Electrification of the Ukraine] Elektryfikatsiia Ukrainy. Dersh. vyd-vo tekhnichnoi lit-ry URSS, 1960. 274 p. (MIRA 14:8)
(Ukraine--Electrification)

KHRISTICH, B

137-58-3-5681

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 170 (USSR)

AUTHORS: Khristich, B., Khristich, I. K.

TITLE: Protection of Metals Against Corrosion by Means of Bluing
(Zashchita metallov ot korrozii voroneniye).

PERIODICAL: Sb.stud. nauchn. rabot. Rostovsk. na-Donu, gos..ped. in-t.
1957, Nr 1 (22), pp 135-140

ABSTRACT: The authors point out that chemistry textbooks employed in high schools lack a description of the bluing process. A number of technological systems, recommended for work with students, is described.

A. L.

Card 1/1

SIMONOV, A.M.; GARNOVSKIY, A.D.; SHEYNKER, Yu.N.; KHRISTICH, B.I.;
TROFIMOVA, S.S.

Some transformations of the systems containing an imidazole
ring. Part 3: Action of bases of N-methyl-N'-(2,4-dinitrophenyl)
imidazolium salts. Zhur. khim. 33 no.2:571-579 F '63.

(MIRA 16:2)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Imidazolium compounds)

ACC NR: AP6033307

SOURCE CODE: UR/0409/66/000/004/0611/0613

AUTHOR: Khristich, B. I.; Simonov, A. M.

ORG: Rostov-on-Don State University (Rostovskiy-na-Donu gosudarstvennyy universitet)

TITLE: Some conversions of systems containing the imidazole ring. Part 5: Properties of naphth[1,2-d]imidazole and imidazo[4,5-f] quinoline

SOURCE: Khimiya geterotsiklicheskih soedineniy, no. 4, 1966, 611-613

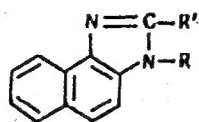
TOPIC TAGS: imidazoquinoline, naphthimidazole, heterocyclic ^{base} compound, organic nitrogen compound

ABSTRACT: It was shown earlier that imidazole systems can be directly aminated at the CH group of the imidazole ring, the process being dependent on the nature of the nucleus joined to this ring. In order to study this conversion further, some new derivatives of naphth[1,2-d]imidazole and imidazo[4,5-f] quinoline and their reactions with sodium amide were studied. 3-Benzyl-naphth[1,2-d]imidazole (Ia), obtained by benzylating naphth[1,2-d]imidazole, readily reacts with sodium amide in dimethylaniline at 110°, forming 2-amino derivatives (Ic). On the contrary, 3-benzylimidazo[4,5-f]quinoline (IIa) cannot be directly aminated under these conditions; nor does 3-methylimidazo[4,5]quinoline (IIb) form a 2-amino derivative when acted upon by sodium amide, although a similarly structured compound of the naphthimidazole series, (Ib), readily undergoes such a conversion.

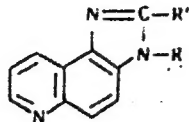
Card 1/2

UDC: 547.785.5+547.831.6+542.958.3

ACC NR: AP6033307



- Ia R=CH₂C₆H₅; R'=H;
 Ib R=CH₃; R'=H;
 Ic R=CH₂C₆H₅; R'=NH₂;



- IIa R=CH₂C₆H₅; R'=H;
 IIb R=CH₃; R'=H;
 IIc R=CH₂C₆H₅; R'=NH₂;
 II d R=CH₂C₆H₅; R'=Cl.

Thus, in contrast to the naphthalene ring, the quinoline ring deactivates the 2-position of the imidazole ring joined to it with respect to sodium amide. 2-Amino-3-benzylimidazo[4,5-f]quinoline (IIc) can be synthesized only by the action of ammonia in the presence of copper salts on 2-chloro-3-benzylimidazo[4,5-f]quinoline (II d), formed by the action of phosphoryl chloride on 3-benzylimidazolono[4,5]quinoline. When sodium amide acts on 3-substituted derivatives of imidazo[4,5]quinoline, the quinoline ring is not aminated either; this is attributed to the influence of the imidazole ring. The melting points are (°C): (Ia) 170°; (Ic) 256°; (IIb) 189-190°; (II d) 170-171°.

SUB CODE: 07/ SUBM DATE: 15Feb65/ ORIG REF: 004/ OTH REF: 002

Card 2/2

KHRISTICH, I.F., redaktor; PETROVSKAYA, Ye., tekhnicheskiy redaktor.

[Temporary production time norms for assembling and repairing laundry equipment] Vremennye proizvodstvennye normy vremeni na montazh i remont prachechnogo oborudovaniia. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva, 1950. 111 p. (MLRA 8:9) [Microfilm]

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye bannoprachechnogo i parikmakherskogo khoziaistva.
(Laundry machinery)

KHRISTICH, I. K.

137-58-3-5681

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 170 (USSR)

AUTHORS: Khristich, B., Khristich, I. K.

TITLE: Protection of Metals Against Corrosion by Means of Bluing
(Zashchita metallov ot korrozii voroneniym).

PERIODICAL: Sb.stud. nauchn. rabot. Rostovsk. na-Donu, gos..ped. in-t.
1957, Nr I (22), pp 135-140

ABSTRACT: The authors point out that chemistry textbooks employed in high schools lack a description of the bluing process. A number of technological systems, recommended for work with students, is described.

A. L.

Card 1/1

KHRISTICH, Y. K. (Rostov-na-Donu)

Formation of glucose from cellulose. Khim. v shkole. no.2:57-58

Mr-Apr '58..

(MIRA 11:3)

(Glucose) (Cellulose)

KHRISTICH, I.K. (g. Rostov-na-Donu)

Laboratory synthesis of urea-formaldehyde plastics. Khim. v shkole 14
no.1:55 Ja-F '59.

(Plastics)

(MIRA 12:2)

KHRISTICH, I.K. (Rostov-na-Donu)

Synthesis of acetaldehyde and acetic acid. Khim. v shkole 15 no.2:
86-87 Mr-Apr '60. (MIRA 14:5)
(Acetaldehyde) (Acetic acid)

KHRISTICH, I.K.

Laboratory synthesis of polybenzyl plastic. Khim. v shkole 17 no.2:
61-62 Mr-Apr '62., (MIRA 1513)

1. Rostovskiy-na-Donu pedagogicheskiy institut.
(Plastics)

KHRISTICH, I. K.

Laboratory method of obtaining ethyl alcohol by acid hydration
of ethylene. Khim. v shkole 17 no.4:62-66 J1-Ag '62.

(MIRA 15:10)

1. Pedagogicheskiy institut, g. Rostov n/Donu.

(Ethyl alcohol)

PARSHIN, A.A., inzh.; REZINK, V.I., inzh.; KHRISTICH, L.M.

New boiler units at the Taganrog Boiler Plant. Bezopasuda v prom. 7
no.1:13-15 Ja '63. (MIRA 16:2)

(Taganrog-Boilers)

MALKINA, D.G.; GUSEV, A.I.; KHRISTICH, M.K. (Voronezh)

Regeneration of the thymus during changes in the thyroid hormone concentration within the organism. Probl. endok. i gorm. 9 no.3:28-31 My-Je '63. (MIRA 17:1)

1./Is kafedry gistologii i embriologii (zav. - chlen-korrespondent AMN SSSR prof. A.A. Boytkevich) Voronezhskogo meditsinskogo instituta.

USHAKOVA, Dora Vasil'yevna; KHRISTICH, O.G. [Khrystych, O.H.], kand.
ekon. nauk; BUTKO, S.D., prof., otv. red.; OLENCHENKO, F.I.,
red.; TROKHIMENKO, A.S. [Trokhymenko, A.S.], tekhn. red.

[Collected problems on general statistical theory] Zbirnyk
zadach z zahal'noi teorii statystyky. Kharkiv, Vyd-vo
Kharkivs'koho univ., 1962. 190 p. (MIRA15:11)
(Statistics--Problems, exercises, etc.)

BUTKO, Stepan Danilovich, prof.; GURIN, Nikolay Illarionovich;
ROGACHENKO, Sergey Nikitovich, dots.; ~~TSILIN~~, Mark
Yakovlevich. ~~Prinimal uchastiye~~ KHRISTICH, O.G., dots.;
RYABENKO, A.I., red.; YEROSHENKO, T.G., tekhn. red.

[Accounting on collective farms] Bukhgalterskii uchet v kol-
khozakh. Pod red. S.D. Butko. Kiev, Gossel'khozizdat USSR,
1962. 417 p. (MIRA 16:2)

(Collective farms--Accounting)

SHVETS, I.T., akademik; KHRISTICH, V.A., kand.tekhn.nauk; STRADOMSKIY,
M.V., inzh. ~~XXXXXXXXXXXXXXXXXXXX~~

Studying the gas-turbine combustion chamber using natural gas
by means of a working-process model. Energomashinostroenie 4
no.11:26-30 N '58. (MIRA 11:11)

1. AN USSR (for Shvets).
(Combustion research) (Gas turbines)

SHVETS, I.T.[Shvets', I.T.]; KHRISTICH, V.A.[Khrystych, V.O.]

Experimental investigation of the fundamental characteristics of
gas-turbine combustion chambers of the vaporization type. Zbir.
prats' Inst.tepl. AN URSS no.16:3-12 '59. (MIRA 13:11)
(Gas turbines)

3/024/60/000/03/026/028
B194/E655

AUTHOR: None given

TITLE: The 13th All-Union Scientific Technical Session on Gas-Turbine Manufacture

PERIODICAL: Investiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr. 3, pp.183 (USSR)

ABSTRACT: The 13th All-Union Scientific Technical Session on stationary and traction gas-turbines was held in Moscow on the 25th and 26th November 1959. It was convened by the Gas-Turbine Commission of the Academy of Sciences of the USSR, together with the State Scientific Technical Commission of the Council of Ministers of the USSR. Reports were read on the operation of gas turbines rated from 300 to 12000 hp and the design of a 90 MW gas turbine. The session was attended by about 400 representatives of Research Institutes, Turbine and Locomotive Works, Design Institutes, Technical Colleges, Councils of National Economy and other institutes. The following reports were read: "Some Results Achieved in the Development of Small Gas-Turbines" by A.Ya.Gerasimov of the Kromosnyer Factory.

3/024/60/000/03/026/028
B194/E655

The 13th All-Union Scientific Technical Session on Gas-Turbine Manufacture

"Results of Experimental Work of the All-Union Thermodynamic Institute on the Gas Turbine at the Shatalov Underground Gasification Station of Podolsk" by G.G.Ol'Morokhly "Stabilization of the Operation of Gas-Turbine Type GT-500 and Adjustment Experiences with Gas-Turbine Type GT-500" by the Nava Works, Leningrad and some results obtained at the Central Boiler Turbine Institute investigations" by the Central Boiler Turbine Institute. "Adjustment and Operating Experience with Gas Turbines of the Nava Works Leningrad" by L.A.Dorfman of the Nava Works. "The Production of Fuel for Traction Gas-Turbines" by V.Nikolayev of the All-Union Scientific Research Institute of the Oil Industry. "Investigation of Problems of the Combustion of Natural Gas in Gas-Turbine Combustion Chambers" by G.M.Medvedev of the All-Union Scientific Research Institute. "An investigation of the possibilities of developing combustion chambers for marine gas-turbines using models" by S.L.Brikin of the Central Scientific

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3/024/60/000/03/026/028
B194/E655

The 13th All-Union Scientific Technical Session on Gas-Turbine Manufacture

Research Institute imeni A.N.Erlyev. "Investigation of Low-Frequency Pulsation in Gas-Turbine Combustion Chambers" by G.V.Dubrovskiy of the Nava Engineering Works. The decisions of the Session indicated the main trends in scientific research and experimental work for the period 1960 to 1963.

Card 3/3

Khristich, V.A

21793

S/123/61/000/004/024/027
A004/A104

26.2131

AUTHORS: Shvets, I. T., and Khristich, V. A.

TITLE: Experimental investigation of the atomizing device in gas-turbine combustion chambers of the evaporative type

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1961, 18-19, abstract 41155. ("Izv. Kiyevsk. politekhn. in-ta", 1960, vol. 30, 98-109)

TEXT: The investigation of fuel evaporation by injecting it into a pipe heated by a flame showed that a high degree of vaporization is ensured if the fuel is injected onto the surface of a pipe whose temperature does not exceed 500°C. In this case the atomization quality practically does not depend on the injection pressure, varying in the range of 2 - 30 kg/cm². The degree of vaporization increases with the growing pipe length and the coefficient of air surplus and decreases with the growing air pressure. At low air temperatures the degree of vaporization improves with the growth of the volatility of the fuel. The authors present an empirical formula for the calculation of the pipe length depending on the degree of vaporization, temperature and coefficient of air surplus.

[Abstractor's note: Complete translation]

I. Barskiy

Card 1/1

KHRISTICH, V.A., kand.tekhn.nauk; LYUBCHIK, G.N.

Intensification of combustion in diffusor burners. Energ. i
elektrotekh. prom. no.2:24-26 Ap-Je '62. (MIRA 15:6)

1. Kiyevskiy politekhnicheskii institut.
(Gas turbines)

KHRISTICH, V.A., kand.tekhn.nauk; BASHKATOV, Yu.N.

Use of a pilot burner for improving the operational characteristics
of a gas turbine combustion chamber. Energ. i elektrotekh. prom.
no.1:25-27 '62. (MIRA 15:6)

1. Kiyevskiy politekhnicheskii institut.
(Gas turbines)

KHRISTICH, V.A., kand.tekhn.nauk; BASHKATOV, Yu.N., inzh.;
CHERNIN, Ye.N., inzh.; SHEVCHENKO, A.M., inzh.

Results of tests and final study using a model of the
combustion chamber of the GT-25-700-1 gas turbine system
with preliminary fuel atomization. Energomashinostroenie
8 no.10:10-13 0 '62. (MIRA 15,11)

(Gas turbines)

ACCESSION NR: AR4015129

S/0124/63/000/012/B047/B047

SOURCE: RZh. Mekhanika, Abs. 12B266

AUTHOR: Khristich, V.A.

TITLE: On pulsation phenomena in the burning of natural gas in gas turbine combustion chambers

CITED SOURCE: Tr. 1-y Vses. nauchno-tekhn. konferentsii po probl. vibratsion. i pul'satsion. goreniiya. M., 1962, 51-59

TOPIC TAGS: pulsation, pulsation phenomena, natural gas, gas combustion, gas turbine

TRANSLATION: The author describes the procedure and results of an experimental study of pulsation combustion in the combustion chamber of a gas turbine operating on natural gas. He studied the effects of the following factors on the characteristics of pulsation combustion: 1) the type of burner device; 2) temperature and air excess factor; 3) type of pilot light; 4) air distribution in the chamber. It was found that the use of register burners with preliminary

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ACCESSION NR: AR4015129

fuel atomization. It is shown that there are two ranges of pressure pulsation: the very low frequency range (below 5 cycles/sec) and the higher-frequency range (30-40 cycles/sec).

It has been shown that the appearance of pulsation combustion is accompanied by changes in some of the characteristics of the working process in the chamber. It is shown that pulsation combustion involves the intensification of mixing processes and an increase in the degree of combustion. It has been shown experimentally the possible means of controlling pulsation combustion are as follows: the installation of pilot lights with regulated flame size; regulation of air distribution in the chamber; any other methods affecting the size and structure of the pilot light. Bibliography with 21 titles. Yu.F. Dityakin.

DATE ACQ: 31Dec63

SUB CODE: PH

ENCL: 00

Card 2/2

KHRISTICH, V.A., kand.tekhn.nauk; SHEVCHENKO, A.M., inzh.

Some special features of the operation of telescopic flame pipes
with deep overlap of the shells. Izv.vys.ucheb.zav.; energ. 5
no.11:69-73 N '62. (MIRA 15:12)

1. Kiyevskiy ordena Lenina politekhnicheskii institut. Predstav-
lena kafedroy parovykh i gazovykh turbin.
(Gas turbines)

KHRISTICH, V. A., and BASHKATOV, Yu. N. (KPI)

"Data about nature of vibration burning in high-forced blast furnaces, working on gasiform fuel".

Report presented at the Section on Physics of Combustion, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651, 19 May 1964.

KHRISTICH, V.A.; KHAVKIN, Yu.I.; TKACHUK, Yu.F.; SHEVCHENKO, A.M.;
LYUBCHIK, G.N.

Study of the possibility of conversion of the combustion
chambers of the GTU-15-800 gas turbine systems to operation
on natural gas. Energ. i elektrotekh. prom. no.2:28-32
Ap-Je '63. (MIRA 16:7)

1. Kiyevskiy politekhnicheskoy institut i leningradskiy mashino-
stroitel'nyy zavod "Ekonomayzer".
(Gas turbines)

KHRISTICH, V. A., and LYUBCHIK, G. N. (KPI)

"Certain regularities of development of a diffusion gas torch, burning in the turbulent wake behind stabilizers."

Report presented at the Section on Physics of Combustion, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651. 19 May 1964.

ACCESSION NR: AP4014235

S/0143/64/000/001/0063/0068

AUTHOR: Khristich, V. A. (Candidate of technical sciences);
Shevchenko, A. M. (Engineer)

TITLE: Effect of the operating mode and injector design upon the temperature level of the flame-tube walls in a gas-turbine combustor

SOURCE: IVUZ. Energetika, no. 1, 1964, 63-68

TOPIC TAGS: gas turbine, gas turbine combustor, flame tube, flame tube wall temperature, gas turbine injector, injector design, gas turbine operating mode

ABSTRACT: An experimental investigation is reported of the effect of (a) air-fuel ratio in the chamber, (b) inlet air temperature, (c) injector design, (d) fuel distribution between the principal and keep-alive injectors, and (e) combustion mode, upon the temperature level of the flame-tube walls. Natural gas from the Daphava fields was used in a large-scale (1:2.5) model of the GT-25-700 gas-turbine combustor. These injector types were tested: (1) pre-mixing register type with 45° blades, (2) diffusion air-twisting register type, (3) diffusion, non-

Card 1/2

SUB

APPROVED FOR RELEASE: 09/17/2001

Card 2/2

KERISTICH, V.A., kand.tekhn.nauk; BASHKATOV, Yu.N., inzh.; BULAVITSKIY, Yu.M.,
inzh.

Study of the possibility of the conversion of the combustion
chamber of the GT-25-700-1 gas turbine system to gas and steam
operation. Energ. i elektrotekh. prom. no.4:19-21 O-D '64.

(MIRA 18:3)

KHRISTICH, V.A., kand.tekhn.nauk; LYUBCHIK, G.N., inzh.

Nomogram for designing gas burners. Energ. i elektrotekh. prom.
no.4:21 O-D '64. (MIRA 18:3)

KHRISTICH, V.A.; SHEVCHENKO, A.M.

Efficient design for the flame tubes of gas-turbine combustion chambers. Mash. i neft. obor. no.6:13-17 '64. (MIRA 18:2)

1. Kiyevskiy politekhnicheskij institut.

KHRISTICH, V.A., kand.tekhn.nauk; LABINOV, S.D., inzh.

Effectiveness of using a cycle with intermediate regeneration in power generating and transport gas turbine systems. Izv. vys. ucheb. zav.; energ. 7 no.8:46-52 Ag '64. (MIRA 17:12)

1. Kiyevskiy ordena Lenina politekhnicheskoy institut. Predstavleno kafedroy parovykh i gazovykh turbin.

ACCESSION NR: AP4045906

S/0114/64/000/009/0012/0015

AUTHOR: Khristich, V. A. (Candidate of technical sciences); Bashkatov, Yu. N. (Engineer); Chernin, Ye. N. (Engineer); Shevchenko, A. M. (Engineer)

TITLE: Effect of a burner on the characteristics of a gas-turbine combustor

SOURCE: Energomashinostroyeniye, no. 9, 1964, 12-15

TOPIC TAGS: combustor, combustor test, combustion chamber, combustion chamber test, gas turbine/GT-25-700-1-LMZ gas turbine plant

ABSTRACT: A continuation of the authors' earlier experiments (Energomashinostroyeniye, 1962, no. 10) is reported. The possibility of a radical improvement in a premixing register burner by modifying its design was explored. The principal experiments were conducted at an air pressure of 1.5 atm, a temperature before the chamber of 300C, an air flow of 7-8 m³/sec, and an air-fuel ratio of 4.5-20 (primary-air ratio, 1.1-5). Several types of

Card 1/3

ACCESSION NR: AP4045906

burners were tested; four of them are shown in Enclosure 1. The flow aerodynamics was investigated with a cold blowdown of the chamber. Register burner I was found to produce the highest temperature field in the flame tube. The best operating conditions of the flame tube were observed (at 700C of exhaust gases) with nonregister-type diffusion burners. The intensity and completeness of combustion were also investigated (curves supplied), as well as combustion stability, pressure loss in the chamber, and the temperature field of exhaust gases. Orig. art. has: 6 figures and 2 tables.

ASSOCIATION: Kiyevskiy politekhnicheskii institut (Kiev Polytechnic Institute);
Leningradskiy metallicheskiy zavod (Leningrad Metal Plant)

SUBMITTED: 00

ENCL: 01

SUB CODE: PR

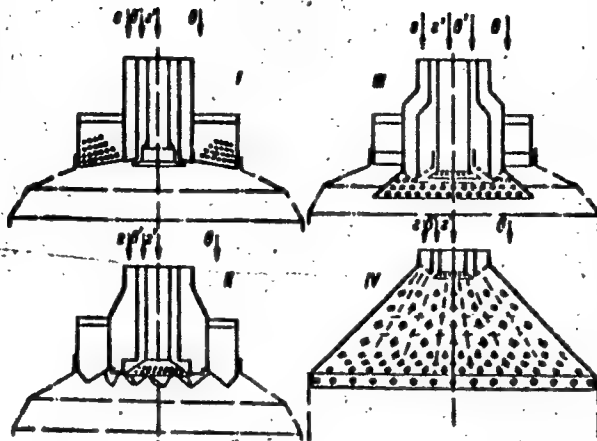
NO REF SOV: 002

OTHER: 000

Card 2/3

ACCESSION NR: AP4045906

ENCLOSURE: 01



Burner types tested.

- I - Flat-register premixing burner
- II - Diffusion-type register burner
- III - Nonregister diffusion burner, cone stabilizer
- IV - Nonregister diffusion burner, jet mixing

Card 3/3

L 25032-65 EPA/EPA(s)-2/EWT(m)/EPF(c)/EPR Pr-4/Ps-4/Pt-10 WW/JW/MLK

ACCESSION NR: AT5004225

S/0000/64/000/000/0202/0206

AUTHOR: Khrstich, V. A.; Lyubchik, G. N.

TITLE: Some relationships for a gaseous diffusion flame burning in the turbulent wake behind a flame holder

SOURCE: AN UkrSSR. Institut tekhnicheskoy teplofiziki. Teplofizika i teplotekhnika (Thermophysics and heat engineering). Kiev, Naukova dumka, 1964, 202-206

TOPIC TAGS: diffusion flame, air breathing propulsion, flame holder, combustion

ABSTRACT: It has been previously found that diffusional burning behind a flame holder gives very high mixing rates, short flame lengths, and higher combustion efficiencies as compared with conventional diffusion flames. Since the flame length is a function of air velocity, high and variable air excess coefficients can be used, which makes the process suitable for use in turbine combustion chambers and in other processes. The design of such a process presents difficulties because of the lack of experimental data. The process has there-

Card 1/3

L 25032-65

ACCESSION NR: AT5004225

fore been studied by obtaining velocity and concentration profiles and by flame photography to determine the effect of the following parameters on the flame length: gas discharge velocity (10—210 m/sec), air velocity (10—50 m/sec), diameter of the gas nozzle (1—5 mm), width of the flame holder (20—40 mm), opening angle of the flame holder (30—180°), angle of attack of the airstream (0—24°), and position of the gas jet in the vertical plane (0—180°). The flame length increased with increasing gas velocity, increasing gas nozzle diameter, and increasing flame holder width, and it decreased with increasing air velocity, opening angle of the flame holder, and angle of attack of the airstream. Since the gas jet was deflected by the recirculation zone in the direction of the flame holder apex, i.e., countercurrently to the airstream, the trajectories of the gas jet could be calculated by a method for jets in transverse flow developed by Yu. V. Ivanov. The experimental data were correlated by an empirical equation for the relative length of the flame as a function of the gas and air densities and velocities, the width of the flame holder, and the gas nozzle diameter. It is recommended that more data be obtained over a wider range of operating and geometry parameters to make the relationship more accurate. Orig. art. has: 3 [pv]

figures.
Card 2/3

L 25032-65

ACCESSION NR: AT5004225

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskoy institut
(Kiev Polytechnical Institute)

SUBMITTED: 10Aug64

ENCL: 00

SUB CODE: FP,ME

NO REF SOV: 003

OTHER: 001

ATD PRESS: 3180

Card 3/3

L 25031-65 EPA/EPA(s)-2/ENT(m)/EPF(c)/EPR Pr-4/Ps-4/Pt-10 WW/JN/MLK

ACCESSION NR: AT5004226

S/0000/64/000/000/0215/0222

AUTHOR: Khrstich, V. A.; Bashkatov, Yu. N.

TITLE: The nature of oscillatory combustion in high-performance combustion chambers operated with gaseous fuel

SOURCE: AN UkrSSR. Institut tekhnicheskoy teplofiziki. Teplofizika i teplotekhnika (Thermophysics and heat engineering). Kiev, Naukova dumka, 1964, 215-222

TOPIC TAGS: combustion, combustion chamber, air breathing propulsion, combustion instability, oscillatory combustion

ABSTRACT: Combustion instability was studied in a test combustion chamber 209 mm in diameter and 6 m long equipped with pressure and oscillation gages. Some of the results were verified on the full-size GT-25-700 turbine combustion chamber. In the experiments, the locations of the instability regions in the chamber and the oscillation frequencies and amplitudes were determined with 5 different burners as a function of the air excess coefficient and air flow velocity (up to 40 m/sec). The calculated natural frequencies and the amplitudes were in good agreement with experimental values. The width of Card 1/2

L 25031-65

ACCESSION NR: AT5004226

the instability regions was a function of air velocity and the air excess coefficient; it decreased with an increasing air excess coefficient. The number and size of the instability regions was found to be dependent on the type of burner. Two burners had substantially different behavior with respect to instability although their geometry was similar. It is concluded that the flame structure is the most important factor in instability. Stability improves when long, thin flames are used. A short, wide flame decreases stability. The flame structure can also be changed by varying the primary-to-secondary air ratio. Orig. art. has: 5 figures. [PV]

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskii institut
(Kiev Polytechnical Institute)

SUBMITTED: 10Aug64

ENCL: 00

SUB CODE: FP

NO REF SOV: 003

OTHER: 001

ATD PRESS: 3180

Card 2/2

KHRISTICH, V.A., kand. tekhn. nauk; SHEVCHENKO, A.M., inzh.

Performance of the flame tubes of gas turbine combustion chambers
operating on natural gas. Energ. i elektrotekh. prom. no.2:20-23
Ap-Je '64. (MIRA 17:10)

L 41817-65 EPA/ENP(f)/EPF(n)-2/EPR/T-2/EPA(bb)-2 Paa-4/PS-4 WW
ACCESSION NR: AP5010969 UR70286/65/000/007/0153/0154

AUTHOR: Khristich, V. A.

TITLE: Annular combustion chamber for a gas turbine. Class 46,
No. 169948

SOURCE: Byulleten' izobrataniy i tovarnykh znakov, no. 7, 1965,
153-154

TOPIC TAGS: gas turbine, combustion chamber, flame tube, flame
stabilizer, combustion intensification

ABSTRACT: This Author Certificate was issued for an annular combustion chamber with a flame tube inside which a fuel collector and a stabilizing device are mounted. In order to intensify the combustion process and reduce the flame tube length, the stabilizing device is made of a system of alternating radial angles inclined to each other and fixed alternately on the inside and outside shells of the flame tube. In a second variant, to achieve uniform fuel supply, the fuel collector is made of two concentric rings on the inner and outer shells of the flame tube with fuel feed ports provided behind the stabilizer angles.

Card 1/2

L 41817-65
ACCESSION NR: AP5010969

ASSOCIATION: none

SUBMITTED: 05Nov63

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: PR,FP

ATD PRESS: 3235

ce
Card 2/2

I 7057-66 EWT(1)/EWP(m)/EWA(d)/ECS(k)/ETC(m)/EWA(1) WW

ACC NR: AP5026853

SOURCE CODE: UR/0170/65/009/004/0501/0506

AUTHOR: ⁵⁵Bannikov, A. I.; ⁵⁵Khristich, V. A.; ⁵⁵Lyubchik, G. N.

ORG: ⁵⁵Kiev Polytechnic Institute (Politekhnicheskiy Institut, Kiev)

TITLE: Thermoelectric method for ^{1,55}measuring gas flow velocity fluctuation

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 4, 1965, 501-506 ^{9M}

TOPIC TAGS: gas flow, flow velocity, velocity measuring instrument, flow measurement, turbulent flow, thermoelectric sensor

ABSTRACT: The theoretical and experimental investigation of combustion and heat exchange processes in fluctuating and turbulent flows indicate that the velocity fluctuations determine decisively the intensity of the processes. However, the existing methods for velocity fluctuation measurements are either incompletely developed or inapplicable to high temperature flows. Consequently, working at the Institute of Engineering Heat Physics of the AN UkrSSR ⁵⁵ (Institut tekhnicheskoy teplofiziki AN UkrSSR) in cooperation with the Kiev Polytechnic Institute (Kiyevskiy politekhnicheskiy Institut), the authors developed a thermoelectric method permitting determinations within very hot gaseous currents. Experiments with the device, shown in Fig. 1, confirm its reliability and simplicity, and the data obtained are in fair agreement with those obtained using different methods of flow velocity fluctuation determination.

Card 1/3

UMC: 537.32+536.587

I. 7057-66
ACC NR: AP5026853

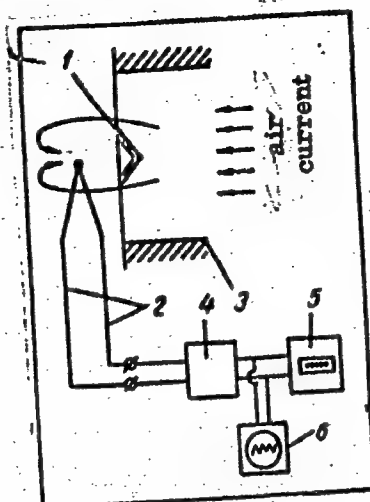


Fig. 1. Device for velocity fluctuation measurements

1 - Stabilizer; 2 - thermocouple; 3 - duct;
4 - instantaneous temperature measurement device; 5 - loop oscillograph; 6 - cathode oscilloscope.

Card 2/3

L 7057-66

ACC NR: AP5026853

The largest signal amplification is obtained during overcorrection operation. The optimum RC/ ϵ of the recorder should be approximately 3 - 5 (ϵ = thermocouple time constant; RC = differentiation loop parameters). Orig. art. has: 7 formulas and 4 figures. [08]

SUB CODE: ME, TD / SUBM DATE: 03Nov64 / ORIG REF: 006 / OTH REF: 001 /

ATD PRESS: *A144*

BC
Card 3/3

KHRISTICH, V.A., kand. tekhn. nauk; OL'KHOVSKIY, G.G.; CHERMIN, Ye.N., inzh.;
BASHKATOV, Yu.N., inzh.; SHEVCHENKO, A.M., inzh.; TUMANOVSKIY, A.G.,
inzh.; GOROBETS, V.S., inzh.

Some results of the tests and adjustment of the combustion chambers
of the gt-25-700 and gtn-9-750 gas turbine power systems. Teploener-
getika 12 no.2:16-20 F '65. (MIRA 18:3)

1. Vsesoyuznyy ordena Trudovogo Krasnogo Znameni teploekhnicheskiiy
institut imeni F.E. Dzerzhinskogo; Kiyevskiy politekhnicheskiiy insti-
tut i Leningradskiy metallicheskiy zavod.

L 29531-66 EWT(m)/T/EWP(f) WW/WE

ACC NR: AR6003724

SOURCE CODE: UR/0285/65/000/009/0021/0021

AUTHOR: Khristich, V. A.; Shevchenko, A. M.

TITLE: Cooling efficiency of the perforated flame tube of a gas turbine combustion chamber

SOURCE: Ref. zh. Turbostroyeniye, Abs. 9.49.140

REF SOURCE: Vestn. Kiyevsk. politekhn. in-ta. Ser. teploenerg., no. 1, 1964, 50-57

TOPIC TAGS: gas turbine engine, natural gas, combustion chamber, ~~flame tube~~, gas fuel, ~~ENGINE COMPONENT, ENGINE COOLING SYSTEM, COMBUSTION CHAMBER WALL TEMPERATURE~~

ABSTRACT: The tube is a plane perforated cylinder, simple in shape and to manufacture. Air from the circular channel of the chamber enters the inner hollow of the flame tube through the holes, creating a dense low temperature layer along its walls, thus decreasing the convective heating of the walls, and facilitating removal of some amount of heat produced by radiation. The tube tendency to wrapping is diminished, the life of the chamber is increased, and the amount of heat-resisting steel used is reduced. The tube is promising for use in combustion chambers working on gas fuel.
T. Gonikberg.

SUB CODE: 21/ SUBM DATE: none/

Card 1/1 LS

UDC: 621.438.001.5

ACC NR: AR6028073

(A,N)

SOURCE CODE: UR/0124/66/000/005/B051/B052

AUTHORS: Khristich, V. A.; Shevchenko, A. M.

TITLE: Several characteristics of heat transfer in a gas turbine combustion chamber operating on gaseous fuel

SOURCE: Ref. zh. Mekhanika, Abs. 5B314

REF SOURCE: Vestn. Kiyevsk. politekhn. in-ta. Ser. teploenerg., no. 2, 1965, 26-33

TOPIC TAGS: gas turbine engine, combustion chamber, combustion research, flame tube, thermocouple

ABSTRACT: Experiments were performed on a common single-register combustion chamber of the straight-flow type. The flame-tube is welded as a single unit. Three rings of 4-mm diameter openings for cooling air are located on its shoulders, and the flame-tube wall cooling is compound. The fuel unit is of the diffusion type. Air is introduced into the combustion region through the register and a perforated cup. To determine the metal and air temperatures, 39 and 8 chromel-aluminum thermocouples, respectively, are used. To measure the flame temperature, movable, water-cooled platinum-rhodium thermocouples were placed at three sections along the length of the flame tube. Compound probes were located at the entrance and exit of the combustion chamber to measure the temperature and velocity of the air and gases. The experiments

Card 1/2

ACC NR: AR6028073

were performed at 1.08--1.37 bar. It was established that during natural gas combustion the heat flow to the walls of the flame tube can exceed $100 \cdot 10^3 \text{ wt/m}^2$ despite the weak radiance of the flame. The convection component represents about 30--40% of the total heat flow in the type of combustion chamber investigated. The total heat flow and its components are not uniformly distributed along the length of the flame tube. The character of the heat flow distributions is strongly dependent on the initial temperature, structure of the flame, and on the operating parameters of the combustion chamber. The cooling of the flame tube walls is accomplished basically by convection. It is important to develop new rational flame tube designs, which will lower the convective part of the heat flow and increase the radiative heat extraction. Bibliography of 4 titles. A. Salamov [Translation of abstract]

SUB CODE: 20, 21

Card 2/2

KHRISTICH, V.M.

DYACHENKO, S.S.; ELISHINA, M.O.; KHRISTICH, V.M.

Investigating the antigen structure of *Shigella paradysenteriae*;
Sonnen preliminary report. Mikrobiol.zhur. 16 no.3: 64-69 '54.
(MLRA 8:7)

1. Z mikrobiologichnogo viddilu Ukrain'skogo institutu epidemio-
logii ta mikrobiologii, m. Kiy.

(ANTIGENS AND ANTIBODIES,

Shigella dysenteriae antigenic structure)

(*SHIGELLA*,

dysenteriae, antigenic structure)

KHRISTICH, V.M. [Krystych, V.M.], mladshiy nauchnyy sotrudnik

Some indices of the coagulating and anticoagulating blood systems in pregnant women with rheumatism. Ped. akush. i gin. 24 no.1:52-53'62. (MIRA 16:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut okhrany materinstva i detstva (direktor - kand.med. nauk O.G.Pap [Pap, O.H.]).

(BLOOD—COAGULATION) (PREGNANCY, COMPLICATIONS OF)
(RHEUMATIC FEVER)

POLYAKOV, N.I., kandidat tekhnicheskikh nauk; NEVSKIY, B.N., inzhener,
retsensent; KHRISTICH, Z.D., kandidat tekhnicheskikh nauk, redaktor.

[Organization of machine tool management in the factory] Organizatsiya
instrumental'nogo khozaystva zavoda. Kiev, Gos. nauchno-tekhn. issled-vo
mashinostroyeniya i sudostroyeniya. lit-ry [Ukr. otdel] 1953. 269 p. (MLRA 7:7)
(Machine tools)

KHRISTICH, Z.D., dots., kand. tekhn. nauk; KRUGLYAK, L.A., inzh.,
retsenzent; KUNIN, F.A., inzh., red.

[Automation of the manufacture of metal-cutting tools]
Avtomatizatsiia instrumental'nogo proizvodstva. Moskva,
Mashinostroenie, 1964. 215 p. (MIRA 17:10)

RODIN, Petr Radionovich; KHRISTICH, Z.D., kand.tekhn.nauk, retsenzent;
SHAPIRO, A.I., inzh., red.; ONISHCHENKO, N.P., red.

[Fundamentals of the theory of the design of metal-cutting
tools] Osnovy teorii proektirovaniia rezhushchikh instrumen-
tov. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry,
1960. 159 p. (MIRA 13:5)
(Metal-cutting tools)

KHRISTICH, Zakhar Dem'yanovich; MOROZENKO, Semen Nikitovich; RCDIN, P.R.,
kand.tekhn.nauk, retsenzent; GAVRILOV, V.D., inzh., red.;
ONISHCHENKO, M.P., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.red.

[Sharpening of metal-cutting tools; manual for grinders] Zatochka
reshmahchego instrumenta; uchebnoe posobie dlia rabochikh-satochni-
kov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960.
169 p. (MIRA 13:12)

(Metal-cutting tools)

DASHEVSKIY, Il'ya Isaakovich; ZASLAVSKIY, Simon Shlemovich;
KHRISTICH, Z.D., dotsent, kand.tekhn.nauk, retsenzent;
CHISTYAKOVA, L.G., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.red.

[Manual on safety measures for grinding-machine operators]
Pamiatka dlia shlifovshchikov i satochnikov. Moskva, Gos.
nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1960. 69 p.
(MIRA 14:4)

(Grinding and polishing--Safety measures)

KARTAVOV, Sergey Alekseyevich, prof.; LEVCHENKO, Andrey
 Matveyevich, kand. tekhn. nauk; RUDNIK, Sergey Sergeyevich,
 doktor tekhn. nauk; BOVSUNOVSKIY, Yakov Ivanovich, kand.
 tekhn. nauk; BAZHENOV, Ivan Ivanovich, kand. tekhn. nauk;
 KOVALENKO, Vladimir Vladimirovich, kand. tekhn. nauk;
 LOMACHENKO, Zinaida Nikolayevna, kand. tekhn. nauk;
 MIL'SHTEYN, Mark Zel'manovich, kand. tekhn. nauk; RADCHENKO,
 Yuliya Gavrilovna, kand. tekhn. nauk; REZNICHENKO, Mikhail
 Petrovich, kand. tekhn. nauk; TRUBENOK, Aleksandr Davidovich,
 kand. tekhn. nauk; KHRISTICH, Zakhar Dem'yanovich, kand.
 tekhn. nauk; SHNAYDERMAN, Isay Yakovlevich, kand. tekhn.
 nauk; GOLUBOV, N.P., kand. tekhn. nauk, retsenzent;
 DUMANSKAYA, V.A., kand. tekhn. nauk, retsenzent; MAKSIMOV,
 G.D., kand. tekhn. nauk, retsenzent; YAKOVENKO, G.A., kand.
 tekhn. nauk, retsenzent

[Technology of the manufacture of machinery] Tekhnologiya
 mashinostroeniia. [By] S.A.Kartavov i dr. Kiev, Tekhnika,
 1965. 526 p. (MIRA 18:7)

1. Kafedra tekhnologii mashinostroyeniya Kiyevskogo poli-
 tekhnicheskogo instituta (for all except Golubov, Maksimov,
 Yakovenko).

24220

S/049/61/000/003/Q05/005
D249/D301

9.9865
3.9300

AUTHOR: Khristichenko, P.I.

TITLE: The problem of the equation of motion of pendulum
seismographs

PERIODICAL: Akademiya nauk SSSR. Seriya geofizicheskaya. Izvestiya,
no. 3, 1961, 443-444

TEXT: The purpose of the present paper is to obtain a more exact differential equation of motion of a seismograph. When a time dependent constraint is applied to a material point, its motion has two components; translational (together with the constraint) and relative (along the constraint). The equation of motion is given (Eq. 1). $\vec{v}_a = \vec{v}_e + \vec{v}_r$ (1)

Neglecting its rotational motion, this equation can be differentiated with respect to time t to give the accelerations $\vec{w}_a = \vec{w}_e + \vec{w}_r$ (2)

Assuming the resistance of the medium to be directly proportional to the

Card 1/3

24220

S/049/61/000/003/005/005
D249/D301

The problem of the equation...

velocity, the author finds from Newton's second law that

$m\ddot{\mathbf{w}}_r = \mathbf{F} + (-m\ddot{\mathbf{w}}_e) + (-\beta\dot{\mathbf{v}}_r) + (-\beta\dot{\mathbf{v}}_e)$ (3) where β is the resistance coefficient. In the seismograph theory the force $\beta\dot{\mathbf{v}}_e$ is usually

neglected although it affects both the amplitude and phase of the pendulum oscillations. The differential equation of motion of a system (or a point) with time-dependent constraints, which allows for the re-sistance of the medium can be deduced using Lagrange's equations of the second type. For a system with time-dependent constraints the equation for kinetic energy is given and the dissipative function is generalized. The author, after a series of differentiations, gives equation of motion of the pendulum (Eq. 8)

Using $\beta/m = 2\epsilon_1$, $g/l = n_1$ and

assuming that the oscillations are small (i.e. $\cos\varphi = 1$, $\sin\varphi = \varphi$), Eq.(8) may be written as

$$\ddot{\varphi} + \frac{\beta}{m}\dot{\varphi} + \frac{g}{l}\sin\varphi = -\frac{\ddot{\mathbf{w}}_e}{l}\cos\varphi + \frac{\dot{\mathbf{w}}_e}{l}\sin\varphi - \frac{\beta\dot{\mathbf{w}}_e}{lm}\cos\varphi + \frac{\beta\dot{\mathbf{w}}_e}{lm}\sin\varphi. \quad (8)$$

(For Eq. (9) see next card)

Card 2/3

KHRISTIC HENKO, P.I.

Supplementary remarks on Sh. N. Pliat's article "Solution of problems of nonsteady heat conduction of hollow cylinders by Grinberg's method. Inzh.-fiz. zhur. 6 no.7:128-129 J1 '63. (MIRA 16:9)

1. Gosudarstvennyy universitet imeni I.I.Mechnikova, Odessa.
(Heat—Conduction)
(Pliat, Sh.N.)

KHRISTICHENKO, P.I.

Nonstationary temperature field of a spherical shell.

Inz.-fiz. zhur. 4 no.12:70-74 D '61.

(MIRA 14:11)

1. Gosudarstvennyy universitet imeni I.I. Mechnikova, Odessa.
(Heat—Conduction)
(Shell molding (Founding))

L 15065-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(k)/EWA(h) Pf-L/Peb ASD(f)-2/
AFMDC/AFTG(p) EM
ACCESSION NR: AP4048856 S/0170/64/000/011/0090/0093

AUTHORS: Khristichenko, P. I.; Prokopets, S. I.

TITLE: Nonstationary temperature field of a nonclosed cylindrical shell 2/6 B

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 11, 1964, 90-93

TOPIC TAGS: cylindrical shell, temperature field, thermal stress

ABSTRACT: The authors treat the problem of solving

$$\frac{\partial t}{\partial Fo} = \frac{\partial^2 t}{\partial r^2} + \frac{1}{r} \frac{\partial t}{\partial r} + \frac{r^2}{r^2} \frac{\partial^2 t}{\partial \varphi^2}; \quad (1)$$

subject to $t(r, \varphi, Fo) = t^0(r, \varphi); \quad (2)$

$$\frac{\partial t}{\partial r} + Bi_1 [t_1(\varphi, Fo) - t] = 0, \quad r = 1; \quad (3)$$

$$\frac{\partial t}{\partial r} - Bi_2 [t_2(\varphi, Fo) - t] = 0, \quad r = 2;$$

$$t(r, 0, Fo) = f_1(r, Fo), \quad t(r, \varphi, Fo) = f_2(r, Fo) \quad (4)$$

Card 1/2

L 15065-65

ACCESSION NR: AP4048856

by the method of finite integral transforms, using asymptotic methods to get quick approximations of certain coefficients. Orig. art. has: 19 formulas.

ASSOCIATION: Gosudarstvennyy universitet im. I. I. Mechnikova, g. Odessa (Odessa State University)

SUBMITTED: 29Oct63

ENCL: 00

SUB CODE: TD, MA

NO REF SOV: 003

OTHER: 001

Card 2/2

L 13260-63

EWI(d)/FOC(w)/BDS AFFTC IJP(C)

S/044/63/000/003/011/047

AUTHOR:

Khristichenko, P. I.

TITLE:

On asymptotic formulas for eigenfunctions and eigenvalues in the case of periodic boundary conditions

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 3, 1963, 39, Abstract 3B178 (Tr. AN TadzhSSR, 109, 1961, 100-106, summary in Takzhikistani).

TEXT:

The boundary value problem is considered for the equation

$$y'' + [s^2 + q(x)]y = 0$$

with periodic boundary conditions $y(0) = y(\pi)$, $y'(0) = y'(\pi)$. The function $q(x)$ and its derivative $q'(x)$ are assumed to be continuous (the abstracter [I. Sobol'] believes that it is necessary to require absolute continuity of $q'(x)$). Asymptotic formulas are derived for eigenvalues

$$s_n = 2n + O(1/2n)$$

Card 1/2

L 13260-63

On asymptotic for eigenfunctions

S/044/63/000/003/011/047

and for the corresponding eigenfunctions.

Abstracter's [I. Sobol'] comment. On page 103 the author makes use of formulas, for example,

$$\int_0^{\pi} q(t) \cos st \, dt = \frac{q(\pi) \sin s\pi}{s} + O(1/s^2),$$

which are valid when the derivative $q'(x)$ is absolutely continuous.

[Abstracter's note: Complete translation.]

Card 2/2

KHRISTICHENKO, P.I.

Nonsteady heat conduction and thermoelastic stresses in a hollow cylinder. Inzh.-fiz. zhur. 6 no.7:76-82 J1 '63. (MIRA 16:9)

1. Gosudarstvennyy universitet imeni I.I.Mechnikova, Odessa.
(Heat conduction) (Thermal stresses)

L 62185-65

EPR(n)-2/EPR/EPA(s)-2/ENG(v)/EWT(l)/EWA(l)

Pe-5/Ps-4/Pt-7/Pu-4 HW

ACCESSION NR: AP5010468

UR/0294/65/003/002/0272/0275
536.21.001

AUTHOR:

Khristichenko, P. I.

TITLE:

Concerning one method of solving problems of thermal conductivity of two- and three-layer systems

SOURCE:
272-275

21
Teplofizika vysokikh temperatur, v. 3, no. 2, 1965,

TOPIC TAGS:
condition

thermal conductivity, layered system, boundary

ABSTRACT:

By transforming the equations for the heat exchange between the individual layers of a two- and three-layer sandwich structure into boundary conditions applying to the individual layers, the author succeeds in splitting the coupled thermal-conductivity equations for the entire system into individual equations applicable to each layer individually. A step by step procedure is developed for the case of a three-layer system. It is shown that whereas for a

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L 62185-65

ACCESSION NR: AP5010468

two-layer system the sequence of solution of the individual problems is immaterial, in the case of a three-layer system a definite sequence must be adhered to. Concrete equations are given for systems of plates, systems of cylinders, and systems of spheres. Original article has: 17 formulas

ASSOCIATION: Odesskiy tekhnologicheskii institut im. M. V. Lomonosova

SUBMITTED: 24Jan64

ENCL: 00

SUB CODE: TD

NR REF SOV: 004

OTHER: 000

Card

NC
2/2

KHIRSTICHESNKO, P. I. (Odessa State university)

"Certain questions of analytic theory of thermal capacity of constant foundry castings"

Report presented at the Section on Thermal-physical Properties and Non-stationary Thermal Capacity, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPFS 24,651. 19 May 1964.

KHRISTIN, L.I.

Application of fresh grated potatoes in dermatology. Vest. vener.,
Moskva no. 6:13-15 Nov-Dec 1952. (GML 24:1)

1. Professor. 2. Stanislav.

KHRISTIN, L.I.

Effect of wormin on the course of skin diseases. Med.paraz. i
paras.bol. 27 no.6:739 N-D '58. (MIRA 12:2)

1. Iz kliniki koshno-venericheskikh bolezney Stanislavskogo me-
ditsinskogo instituta.

(ASCARDIS AND ASCARIASIS)

(SKIN--DISEASES)

ABDUSAMETOV, R.Kh. (Semipalatinsk), ANTON'YEV, A.A., kand.med.nauk. (Rostov-na-Donu), BRZHESKIY, V.Ch. (Tikhvin, Leningradskaya oblast')
 GRZHEBIN, Z.N., prof. (Chernovitsy), IVANOV, N.A., prof. (Leningrad)
 KAZAKOV, V.I., dots. (Stavropol' na Kavkaze), SLADKOVICH, S.Ye.
 (Moskva), TORSUYEV, N.A., prof. (Rostov-na-Donu), MAESIPOVA, A.A.,
 dots. (Rostov-na-Donu), FAYN, A.E., kand.med.nauk (Saratov) KHRISTIN, L.I.
 prof. (Stanislav), YAKUBSON, A.K., prof. (Novosibirsk), LESNIKOV, Ye.P.,
 assistant (Novosibirsk)

Problems of teaching dermatovenerology in medical institutes. Vest.
 derm. i ven. 32 no.3:60-69 '58 (MIRA 11:7)

(DERMATOLOGY, educ.
 in Russia (Rus))
 (SYPHILOLOGY, educ.
 in Russia (Rus))

KHRISTIN, L. I., prof.; KOTSAN, M. K., klinicheskiy ordinator

Study on the etiology and pathogenesis of lupus erythematosus.
Vest. dermat. i ven. 34 no.1:13-17 Ja '60. (MIRA 14:12)

1. Iz kafedry kozhnykh i venericheskikh bolezney Stanislavskogo
meditsinskogo instituta.

(LUPUS)

KHRISTIN, L., prof.; TSHETSETSKAYA, Ye.K.; DIMITRASHKO, V.I.

Epidermophytosis in combination with other lesions of the skin.
Vest.derm.i ven. 35 no.5:63-64 '62. (MIRA 15:5)

1. Iz kliniki kozhno-venericheskikh bolezney Stanislavskogo meditsinskogo instituta.
(DERMATOMYCOSIS) (SKIN--DISEASES)

KHRISTININ, Viktor Ivanovich [Khrystynin, V.I.]; MILORADENKO, P.F.
[translator]; FINK, L.Y. [Fink, L.I.], red.; CHUCHUPAK, V.D.,
tekhn. red.

[Daily hygienic exercises for women] Shchodenna higienichna
gimnastyka dlia zhinok. Kyiv, Derzh. med. vyd-vo URSR, 1961.
40 p. (MIRA 15:3)
(WOMEN—HEALTH AND HYGIENE) (EXERCISE)

KHRISTININ, Viktor Ivanovich; NEYMAN, M.I., red.; PRONINA, N.D.,
tekhn. red.

[Physical culture for intellectual workers] Fizkul'tura dlia
rabotnikov umstvennogo truda. Moskva, Medgiz, 1963. 39 p.
(MIRA 16:5)

(PHYSICAL EDUCATION AND TRAINING)

S/058/63/000/003/048/104
A062/A101

AUTHORS: Balabukha, D. K., Levenberg, T. M., Lokutsiyevskaya, L. K.,
Khristina, G. N.

TITLE: Sensitometric test for controlling color reproduction. I. Construc-
tion principles of the test

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 87, abstract 3D589
("Tr. Leningr. in-ta kinoinzhenerov", 1961, no. 6, 91 - 98)

TEXT: This is a report on elaborated construction principles of a test
for investigating and controlling color reproduction in color photography proces-
ses. The application of such a test permits to replace the physiological colo-
rimetric evaluation of the color reproduction by a physical evaluation, based on
the measurement of the dye concentrations. The investigation, by this test, of
all the stages of a color photography process (color separation, synthetic and
gradation stages) in their mutual relationship permits to describe the color re-
production as an objective process property characterized by the configuration
of the color reproduction bands. The test provides the possibility to judge on

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Sensitometric test for controlling...

S/058/63/000/003/048/104
A062/A101

the intermediate images, obtained at the different technological stages, about the color separation and gradation characteristics of these stages. Thus, with the aid of the test, it is possible to determine the part of different technological factors in the formation of the quality of a color image. It is shown that by the test it is possible to compare objectively different color photography processes and different technological variations of the same process.

[Abstracter's note: Complete translation]

Card 2/2

S/058/63/000/003/049/104
A062/A101

AUTHORS: Balabukha, D. K., Levenberg, T. M., Lokutsiyevskaya, L. K.,
Khristinina, G. N.

TITLE: Sensitometric test for controlling color reproduction. II. Technology of preparing the test for the motion-picture industry

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 87, abstract 3D590
("Tr. Leningr. in-ta kinoinzhenerov", 1961, no. 6, 99 - 105)

TEXT: This is a report on the elaborated technology of preparing tests for color reproduction control in multilayer and hydrotype color photography processes, and on the experimental samples of these tests. For Part I see abstract 3D589.

[Abstracter's note: Complete translation]

Card 1/1

KHRISTIIY, S.P. (Kovel')

Preventive medical significance of an alcohol vaccine administered intracutaneously in the compound treatment of acute dysentery.
Vrach.delo no.8:114-118 Ag '62. (MIRA 15:11)

1. Infektsionnoye otdeleniye (zav. - S.P.Khristiy) gorodskoy bol'nitsy.

(DYSENTERY) (VACCINES)

KHRISTII, S.P.

Hepatic syndrome and its diagnostic significance in the clinical picture of salmonellosis. Vrach.delo no.1:132-133 Ja '63.

(MIRA 16:2)

1. Kavel'skaya gorodskaya bol'nitsa.

(LIVER--DISEASES)

(SALMONELLA INFECTIONS)

2240 Khristo, A. A.

Stelyushchiy Sya Sad. Novosibirsk, Kn. IZD., 1954. 103 s. s Ill. 20 sm. 5.000
EKZ. lr. 75k.- Bibliogr: s. 99-100.-

(54-55995)p

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KHRISTO, Andrey Andreyevich

[Pomology in Siberia] Plodovodstvo v Sibiri. Izd. 2., ispr. i dop.
[Novosibirsk] Novosibirskoe knizhnoe izd-vo, 1957. 298 p. (MIRA 11:3)
(Siberia--Fruit culture)

KHRISTO, A.A.

Effect of additional water supply on the winter hardiness of
apple trees in Novosibirsk Province. Trudy TSSBS no.4:177-181
'60. (MIRA 15:4)
(Novosibirsk Province--Apple--Frost resistance)

KHRISTO, A.A.

The dormancy period and winter hardiness of apple trees in Western
Siberia. Fiziol. rast. 8 no.1:58-66 '61. (MIRA 14:3)

1. Central Siberian Botanical Garden of the Siberian Branch of the
U.S.S.R. Academy of Sciences.

(Novosibirsk Province—Apple) (Plants—Frost resistance)
(Dormancy in plants)

KHRISTO, S. ST.

Admeasuring of the Carrying (Suspending) Cable of a Suspension Cable Line
(Cable-way) Anchored at its Two Ends. In the Bulgarian Heavy Industry,
3:23:Mar 55

KHRISTODULO-FINITI, A. S., Cand Med Sci -- (diss) "Arteries of the heart in man in some periods of ontogenesis." /Stalino/, 1960. 14 pp; (Ministry of Public Health Ukrainian SSR, Stalino State Medical Inst im A. M. Gor'kiy); 220 copies; price not given; (KL, 22-60, 145)

KHRISTODULO-FINITI, A.S.

Atrioventricular valves of the human heart. Arkh.anat.gist. 1 embr.
48 no.3:56-60 Mr '65. (MIRA 18:6)

1. Kafedra anatomii chelovska (zav. - prof. N.D.Dovgyallo) Donetskogo meditsinskogo instituta.

KHRISTOFENZEN, G.S.

Polyunsaturated fatty acid content in the fats of main commercial fishes in the Azov-Black Sea Basin. Vop. pit. 23 no.5:17-20 S-0 '64. (MIRA 18:5)

1. Tekhnologicheskaya laboratoriya (zav. - kand.tekhn.nauk G.K. Koval'chuk) Azovsko-Chernomorskogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii, Kerch'.

KHRISTOFERZEN, G.S.; TIMOFEYeva, N.V.

Technological and chemical characteristics of the Atlantic
sardine and causes of the deterioration of its quality
during industrial processing. Trudy Azharniro no.21:40-46
163. (MIRA 17:8)

KHRISTOFERZEN, G.S. [Khrystoforzen, H.S.]

Use of the propyl gallate antioxidant for preserving the
quality of frozen Atlantic fish. Khar. prom. no.1:27-29
Ja-Mr '65.

(MIRA 18:4)

KHRISTOFORIDI, Kh.G.; GERASIMOV, V.G.

Mechanization of the sealing of tight barrels. Trudy Azcherniro
no.21:60-63 '63. (MIRA 17:8)

KHRISTOFOROV, A.I., inzh.; MITIN, V.M.

Friction welding of high-speed steel with structural steel.
Mashinostroenie no.1:99-100 Ja-F '65. (MIRA 18:4)

KHRISTOFOROV, A.I., inzh.

Friction welding of boring bit blanks. Svar.proizv. no.5:32-53
My '65.

(MIRA 18:6)

1. Khar'kovskiy politekhnicheskii institut im. V.I.Lenina.